CLAIMS:

Sub A1

1. A long life gas engine oil comprising a major amount of an oil of lubricating viscosity and a minor amount of additives comprising phenolic anti oxidants and viscosity index improver, but which does not contain aminic anti oxidant, wherein the phenolic anti oxidant is present in an amount in the range of about 0.1 to 2 vol% and the viscosity index improver is present in an amount in the range of about 0.1 to 3 vol%.

2. The long life gas engine oil of claim 1 wherein the oil of lubricating viscosity is a natural oil, a synthetic oil or a mixture thereof having a viscosity of between about 5 to 20 cSt at 100°C.

3. The long life gas engine oil of claim 1 or 2 wherein the oil of lubricating viscosity has a viscosity of between about 7 to 16 cSt at 100°C.

Sub A2

4. The long life gas engine oil of claim 3 wherein the phenolic anti oxidant is present in an amount in the range of about 0.3 to 1.75 vol% and the viscosity index improver is present in an amount in the range of about 0.2 to 2 vol%.

5. The long life gas engine oil of claim 4 wherein the oil of lubricating viscosity has a viscosity of between about 9 to 13 cSt at 100°C, the phenolic anti oxidant is present in an amount in the range of about 0.5 to 1.5 vol% and the viscosity index improver is present in an amount in the range of about 0.3 to 1.5 vol%.

Sub A3

6. A method for enhancing the life of gas engine oils as evidenced by a reduction in viscosity increase, oxidation, nitration, TAN increase, and

Sub A3 Cont.

TBN depletion, comprising adding to a gas engine oil comprising a major amount of an oil of lubricating viscosity but which does not contain aminic anti-oxidant, a minor amount of a phenolic anti oxidant in the range of about 0.1 to 2 vol% and a minor amount of a viscosity index improver in the range of about 0.1 to 3 vol%.

7. The method of claim 6 wherein the oil of lubricating viscosity is a natural oil, a synthetic oil or a mixture thereof having a viscosity of between about 5 to 20 cSt at 100°C.

8. The method of claim 6 or 7 wherein the oil of lubricating viscosity has a viscosity of between about 7 to 16 cSt at 100°C.

Sub A4

9. The method of claim 8 wherein the phenol anti oxidant is added to the lubricating oil in an amount in the range of about 0.3 to 1.75 vol% and the viscosity index improver is added to the lubricating oil in an amount in the range of about 0.2 to 2 vol%.

10. The method of claim 9 wherein the oil of lubricating viscosity has a viscosity in the range of about 9 to 13 cSt at 100°C, the phenol anti oxidant is added in an amount in the range of about 0.5 to 1.5 vol%, and the viscosity index improver is added in an amount in the range of about 0.3 to 1.5 vol%.

Add B5